

SATEL', E.A., zasluzhenny deyatel' nauki i tekhniki.

Economic justification of standards. Standartizatsiia no.2:6-9 Mr-Ap
'57. (MIRA 10:6)

(Standardization)

SATEL', E.

Scientific research work on labor in institutes of the machinery
manufacturing industry. Sots.trud no.6:40-44 Je '57. (MIRA 10:7)
(Machinery industry) (Labor productivity)

SATEL', E.A., zasluzhennyy deyatel' nauki i tekhniki doktor tekhn.nauk prof.

Basic stages in the development of Russian mechanical engineering.
Vest.mash. [37] no.11:83-88 N '57. (MIRA 10:10)
(Mechanical engineering)

SATEL', E. A.

Satel', E. A. (Moscow). Some Aspects of Interchangeability in Machine-building p. 97

Interchangeability, Accuracy and Measuring Methods in Machine Building, Moscow, Mashgiz, 1958, 251 pp. (Sbornik Nauchno-tekhn. obshch. mashinostroitel'noy promyshlennosti, Leningradskoye oblast pravleniya, kn. 47).

This collection of articles deals with the topics discussed at the 3rd Leningrad Sci. and Engineering Conference on Interchangeability, accuracy and Inspection Methods in Machine-building and Instrument-making, held 18-22 Mar 1957.

KUTAY, Anton Konstantinovich; KORDONSKIY, Khaim Borisovich; SAPEL', E.A.,
zasluzhennyy deyatel' nauki i tekhniki, prof., doktor tekhn.
nauk, rezensent; MITROPOL'SKIY, A.K., prof., red.; LEVKINA,
T.L., red.izd-va; CHEFAS, M.A., red.izd-va; POL'SKAYA, R.G.,
tekh.n.red.

[Precision analysis and quality control with the application of
mathematical statistics] Analiz tochnosti i kontrol' kachestva
v mashinostroenii s primeneniem metodov matematicheskoi statistiki.
Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1958.
362 p. (MIRA 12:2)
(Machinery industry--Quality control) (Mathematical statistics)

SATEL, E.A.
25(5) p.r

PHASE I BOOK EXPLOITATION

SOV/1392

Leningrad. Inzhenerno-ekonomicheskiy institut

Organizatsiya i planirovaniye ravnomernoy raboty mashinostroitel'nykh predpriyatiy; Mezhvuzovskoye soveshchaniye. Doklady (Organization and Planning of Uniform Work in Machine-building Enterprises; Conference of Vuzes. Reports) Moscow, Mashgiz, 1958, 366 p. (Series: Its: Trudy, vyp.22) 4,000 copies printed.

Eds.: S.A. Volkov, and K.G. Tatevosov.; Tech. Ed.: L.V. Sokolova; Managing Ed. for Literature on Machine-building Technology (Mashgiz): Ye.P. Naumov, Engineer.

PURPOSE: This collection of articles is intended for engineering and technical personnel in machine-building establishments, and for scientific workers and students of institutes and departments of engineering and economics.

COVERAGE: This collection of articles contains reports by workers from vuzes, scientific research institutes, and industrial establishments presented at the conference of vuzes on the subject: "Organization and Planning of Uniform Operations in Machine-building Establishments." These reports discuss general problems encountered in organization, analysis, and theory of uniform production, as well as problems in schedule planning, technical preparation, and production specialization.

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. Organization and Planning of Uniform (Cont.)

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SATEL, E.A

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[Manual of a machinery designer and constructor; in two volumes] Spravochnik tekhnologa-mashinostroitelia; v dvukh tomakh. Glav. red. V.M.Kovan. Chleny red.soveta B.S.Balakshin i dr. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry. Vol.1. Pod red. A.G.Kosilovoi. 1958. 660 p. (MIRA 13:1)
(Mechanical engineering--Handbooks, manuals, etc.)

SATEL', B.A., prof., zasluzhennyy deyatel' nauki

Tasks of our periodical. Nauch.dokl.vys.shkoly; mash.i prib.
no.1:5-6 ' 58. (MIRA 12:1)

1. Otvetstvennyy red. zhurnala "Nauchnyye doklady vysshey shkoly (Seriya Mashinostroyeniye i priboro-stroyeniye)." (Mechanical engineering)

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SOV/159-58-3-2/31

AUTHOR:

Satel', E.A.

TITLE:

Current Technological Problems in Machine Building and Instrument Building and the Organization of Their Solution at Higher Educational Institutions

PERIODICAL:

Nauchnyye doklady vysshey shkoly, Mashinostroyeniye i priborostroyeniye, 1958, Nr 3, pp 8-14 (USSR)

ABSTRACT:

At the end of January 1958, a conference on current technological problems in machine building and instrument building was convened at the MVTU imeni Baumana according to a decision of the USSR Ministry of Higher Education. Scientists of 22 vuzes and representatives of scientific research institutes and industrial installations participated. Two groups of problems were discussed at the conference. The first group dealt with theoretical problems of the machine building and instrument building technologies. The second group dealt with the development of automation and complex mechanization in machine building. At the plenary sessions of the conference 11 reports were

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heard, dealing with the aforementioned subjects. At the sessions of the conference sections, a total of 41 reports was heard and discussed. Some of these reports will be published in the periodical "Nauchnyye doklady vysshey shkoly". The conference sections dealt with problems of mechanical processing, hot processing of metals by pressing, foundry technology, metallography and thermal processing, instrument building and welding. In the reports delivered at the conference it was said that modern engineering requirements necessitate the application of larger machines, new materials and new technological methods. For example, the power of steam turbines rose from 150,000 kw to 300,000 kw and for the future turbines of 600,000 kw are in the planning stage, working on 300 atmospheres steam pressure and 650°C superheating temperature. Hydraulic presses are built with capacities which rose from 10,000-15,000 tons to 70,000-

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100,000 tons, and for the future still higher pressures are planned. The component parts of the machines must have greater strengths and must be more durable, but their weight must be reduced at the same time. They must sustain static and dynamic stresses. Further, metal surfaces are required which will sustain temperatures of 2,500°C, even if only for short periods. The application of new metals necessitates the development of new processing technologies, for example, for processing titanium alloys. In machine building, the mechanical links formerly used were replaced by electric, hydraulic or pneumatic links. Electronics found a wide-spread application for controlling all kinds of processes. It was possible to reduce the time required for some machining operations up to 90%. The introduction of new links in the technology of machine building presents problems of interchangeability and accuracy. The application of thin sheet metal construc-

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tion for reducing the weight of machines creates the problem of providing the accuracy of measuring circuit in assemblies composed of low-rigidity parts. The latter problem was the subject of the reports of Professors E.A. Satel', A.I. Yakushev, Docents A.K. Dobrovol'skiy and M.L. Bykhovskiy. Many Soviet scientists work on problems connected with the increase of the shock resistance of machine parts and technological methods for achieving the latter. Such problems were discussed in the reports of Professors E.A. Satel', B.S. Balakshin, Ye.A. Popov, A.N. Malov. The reports of Professors and Docents I.I. Sidorin, G.A. Nikolayev, N.N. Rubtsov, D.P. Ivanov, N.A. Barinov, O.K. Kotov, and others, dealt with problems of providing new auxiliary materials for foundry operation, for example, for shell molds. Professors I.I. Sidorin, Ye.A. Popov, G.A. Nikolayev, N.N. Rubtsov, D.P. Ivanov, and Docents

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G.F. Balandin, O.K. Kotov, V.D. Sadovskiy, N.F. Kazakov and others reported on plastic deformation theory, theoretical problems of welding, theories of alloys and thermal processing, theories of molding and crystallization in foundry and other industries, surface hardening, diffusion compounds of metals and alloys. Professors and Docents E.A. Satel', G.F. Balandin, V.S. Korsakov, Ye.A. Popov, S.O. Yakobson, D.V. Charnko, A.I. Yakushev, A.N. Malov, M.L. Bykhovskiy, Yu.G. Proskuryakov and N.F. Kazakov reported on theoretical problems connected with cold processing of metals, theory of rigidity, processing of heat resistant alloys, theory of program controlled processes in metal cutting and other machine tools, theory of interchangeability and related subjects. Problems of automation were the subjects of the reports of G.A. Shaumyan, G.A. Nikolayev, E.A. Satel', S.I. Artobolevskiy, V.V. Solodovnikov, A.I. Yakushev, B.V. Ani-

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simov, N.I. Kamyshnyy, Cherkalin, A.D. Assonov, A.A. Lukovenko. Professors E.A. Satel', V.V. Solodovnikov, A.M. Kugushev delivered reports at the conference in which they pointed out the inadequate utilization by technological sciences of the recent scientific achievements made in physics, chemistry and electronics, as well as the application of the theory of plastic deformations, automatic production control, theory of probability and automation programming. The work of the technologists using the aforementioned achievements, is still in the initial phase of its development. The achievements of nuclear physics should also be used in various technological processes. Concerning automation, the conference arrived at the conclusion that machines and devices of all technological classifications should be automated, using extensively electronic controls. Automation has the purpose of increasing quantity and quality at the same time.

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Methods must be developed for automating the equipment already existing at industrial installations. At technological colleges, the training of automation engineers must be emphasized. It is necessary to establish a special course at these colleges, dealing with the automatic technological process control. The conference participants asked the USSR Ministry of Higher Education to establish a coordination program for the work on the principal problems of technologies used in machine building and instrument building. The research work of the chairs of machine building and instrument building should be coordinated and controlled. The research results should be disseminated regularly. The laboratories of the vuzes must be equipped with more modern devices and instruments. Funds should be made available for special laboratories dealing with technological problems. These funds may be procured by budget assignment of

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the Ministry of Higher Education and by contracts with industrial installations and organizations. The conference participants approved the suggestion that a central laboratory should be established at the MVTU, dealing with important problems of developing technological process theories. Such laboratories work successfully in the USA and in Czechoslovakia. The conference delegates brought to the attention of the USSR Ministry of Higher Education the fact that vuz scientists do not adequately study economic and technological developments in foreign countries. Soviet scientists should participate in scientific conferences and exhibitions in foreign countries. Finally, it was decided at the conference that conferences on technological problems and current developments should be held not less than once within

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two years. An organizational committee should be established for organizing such a conference in 1959/1960. This committee may also serve for coordinating the theoretical work of the vuzes in the field of machine building technology during the time between the conferences.

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SATEL, Ye.A.

SOV/122-58-5-25/26

AUTHOR: Podurayev, V.N., Candidate of Technical Sciences, Dotsent ..

TITLE: Inter-Vuz Conference on Technology
(Mezhvuzovskaya tekhnologicheskaya konferentsiya)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 5,
p 84 (USSR)

ABSTRACT: An inter-vuz conference took place in January, 1958 at the MVTU (Moscow Technical University) imeni Bauman, devoted to manufacturing problems in the engineering and instrument industries. 22 universities and representatives of research institutes in the main engineering and instrument branches took part. Over 50 papers were read. The following papers were devoted to the state of knowledge of the theoretical foundations of production engineering. "The Basic Trends of Development in Engineering Manufacture" by SateL Ye.A., "The Fundamental Theoretical Problems in the Development of Casting", by Rubtsov, M.N., "Current Problems of Metallurgy and Heat Treatment of Metals" by Sidorin, I.I., Professor, "Accuracy and Interchangeability in Engineering" by Prof. B.S. Balakshin and "Present State of the Theory of Plastic Deformation in Press-forming Manufacture" by Ye.A. Popov, Doctor of Technical Sciences. In these papers, the main attention was devoted to

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Inter-Vuz Conference on Technology

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manufacturing methods which could be performed by small, light, universal and economic plants. new production methods capable of improving the life of machine components are needed. The trends of increasing power of machine tools, greater expansion of high-speed manufacturing processes and the need to ensure the greatest precision in manufacture were emphasized. The theory of interchangeability of machine components requires further development primarily in its application to pneumatic, hydraulic and electrical elements. In several papers, the inadequate use made in the theory of manufacturing methods of modern achievements in science was deprecated. Further developments in the several branches of engineering science needed in connection with topical manufacturing problems were indicated. Widespread automation and overall mechanisation of manufacture were discussed in the following papers: "Trends of Development in Automatic Welding" by Nikolayev, G.A., Professor, Corresponding Member of the Academy of Architecture and Building "The Automation of Manufacturing Processes in Engineering" by Prof. G.A. Shaumyan, "The Part Played by Electronics in the Solution of Automation Problems" by Kugushev, A.M., Professor, "The Configuration and Classification of Automatic Production

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Inter-Vuz Conference on Technology

Machines and Their Basic Elements" by Prof. S.I. Artobolevskiy, "The Basic Trends of Development in the Theory of Automatic Regulating and Control" by Solodvnikov, A.V. Professor, "The Application of Electronic Devices to the Programme Control of Metal Cutting Machine Tools" by B.V. Anisimov. In the present state of its development, automation must ensure not only an increased productivity of labour but also a high accuracy in the performance of its individual operation and the constancy of its properties in time. Problems of the evaluation of the economic effectiveness of introducing any form of automation under given manufacturing conditions must be further elucidated. The flexibility of automated production should be given attention. The problems set by these developments must be solved to an increasing degree by the methods of automatic electronic regulating and control and by programme control systems.

Card 3/3 1. Industrial Production--USSR 2. Engineering--USSR 3. Instruments
--Production

SATKEL', E.A., prof., zasluzhennyy deyatel' nauki i tekhniki, doktor tekhn. nauk

Planning technical developments in the machinery industry considered as a prerequisite for efficient organization of rhythmical production. Trudy LIEI no.22:18-41 '58. (MIRA 11:12)

1. Moskovskiy inzhenerno-ekonomicheskiy institut imeni Ordzhonikidze. (Industrial management)

SATEL', E.A., zaslushennyy deyatel' nauki i tekhniki, doktor tekhn. nauk, prof.;
MAGNITSKIY, S. V.

"Design and construction of shoe machinery" by I.I. Kapustin. Reviewed
by E.A. Satel', S.V. Magnitskii. Vest. mash, 38 no.4:86 Ap '58.
(MIRA 11:3)

1. Glavnyy inzhener fabriki "Parizhskaya kommuna."
(Shoe machinery)
(Kapustin, I.I.)

SATEL', E.A. (Moskva)

Problems of the interchangeability in machine building. [Izd.]
LONITOMASH 47:97-100 '58. (MIRA 11:10)
(Interchangeable mechanisms)

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PHASE I BOOK EXPLOITATION

SOV/3107

Satel', Eduard Adamovich, Viktor Aleksandrovich Letenko, Georgiy Anatoliyevich Bryanskiy, and Georgiy Ivanovich Samborskiy

Osnovy tekhnicheskoy podgotovki proizvodstva i organizatsiya truda
(Fundamentals of Industrial Engineering) Moscow, Mashgiz, 1959:
330 p. 15,000 copies printed.

Ed.: E. A. Satel', Doctor of Technical Sciences, Professor; Re-
viewers: Department of Organization and Planning for the Machine-
building Industry, Moscow Automotive Engineering Institute;
N. A. Orlov, Professor; I. L. Frumin, Engineer, Economist;
N. A. Stel'makhovich, Candidate of Technical Sciences;
A. V. Belyayev, Engineer, Economist; Ed.: A. R. Sochinskiy,
Engineer; Ed. of Publishing House: A. A. Salyanskiy; Tech. Ed.:
V. D. El'kind; Managing Ed. for Literature on the Economics and
Organization of Production: T. D. Saksaganskiy, Engineer.

PURPOSE: This textbook is intended for students at institutes of
engineering economics and schools of higher technical education.

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Fundamentals of Industrial (Cont.)

SOV/3107

COVERAGE: The book deals with product designing, production planning, estimation of production capacity, work organization, and wages at machinery-manufacturing plants. It is one of a series of six textbooks issued by the Moskovskiy inzhenerno-ekonomicheskiy institut imeni Ordzhonikidze (Moscow Institute of Engineering Economics imeni Ordzhonikidze) for the course, Organization and Planning of Machinery-manufacturing Plants. No personalities are mentioned. References follow each part.

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PRINCIPLES OF PRODUCTION PLANNING

PART I. INDUSTRIAL PLANNING OF A MACHINE-BUILDING PLANT AND ORGANIZING FOR PRODUCTION PLANNING

Ch. I. Principles of the Industrial Planning of a Plant

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Satel', E.A.

PHASE I BOOK EXPLOITATION

SOV/1947

Moscow. Vyssheye tekhnicheskoye uchilishche im. N. E. Baumana.

Povysheniye dolgovechnosti detaley mashin; sbornik statey (Extending the Service Life of Machine Parts; Collection of Articles) Moscow, Mashgiz, 1959. 161 p. (Series: Its: [Trudy] 91) Errata slip inserted. 6,000 copies printed.

Eds. (Title page): E. A. Satel', Honored Worker in Science and Technology, Doctor of Technical Sciences, Professor and D. N. Reshetov, Doctor of Technical Sciences, Professor; Ed. (Inside book): R. M. Korableva, Engineer; Tech. Ed.: V. D. El'kind; Managing Ed. for Literature on General Technical and Transport Machine Building (Mashgiz): K. A. Ponomareva, Engineer.

PURPOSE: This collection of articles is intended for mechanical and metallurgical engineers and technicians.

COVERAGE: Articles included in this collection were presented to the Scientific and Technical Convention held at the Moscow Higher Technical School in 1957. The Convention met to explore the possibilities of extending the service life of machines and their parts. The articles cover problems pertaining to machine

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Extending the Service Life of Machine Parts (Cont.)

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building, engineering, and the thermal and chemical treatment of the materials used for machine parts. Pretreatment and processing of machine parts and the materials from which they are made are reviewed, and ways of extending their service life explored. Causes of material corrosion, fatigue, and deterioration are investigated. Problems of extending the service life of automobiles, lowering their weight, improving the wear resistance of brake linings, and eliminating overheating are discussed. In addition, low temperature cyanidation of structural steel is described, and the durability of tractor transmissions and ways of improving it dealt with. The book contains numerous graphs, tables, illustrations and formulas. Individual articles are accompanied by references.

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Reshetov, D. N. Service Life of Machines and the Most Effective Ways of Extending It

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SATEL', E.A.

Seven-year plan for scientific research in institutions of higher
technical education. Nauch. dokl. vys. shkoly; mash. i prib. no.2:
3-6 '59. (MIRA 12:12)

(Engineering research)

SOV/3-59-4-3/42

22(1)

AUTHORS: Satel', E.A., Doctor of Technical Sciences, Professor, Voronin, M.I., and Yelizavetin, M.A., Candidates of Technical Sciences, Docents

TITLE: Planning of **Vuz Degrees** Under Present Conditions

PERIODICAL: Vestnik vysshey shkoly, 1959, Nr 4, pp 14-19 (USSR)

ABSTRACT: The training of specialists at higher schools is being reorganized at present. The planning of the diploma design presents an important stage in this training. The state of design planning in several machine building vuzes indicates that in the majority of graduation works, sufficient attention is paid to developing modern machine designs and methods of their production, and that a considerable number of projects are based on realistic themes. This means that on the whole the planning of diploma designs in machine building specialties is satisfactory. However, because of insufficient connection between the higher school and production places, and as the students' training does not fully reflect problems relating to the theory and prospects of development of science

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Planning of **Vuz Degrees** Under Present Conditions

and engineering, the planning of designs is in several vuzes not in accordance with the requirements. Practice shows that the diploma designs worked out by students of correspondence vuzes more often meet the demands of industry than those prepared by day-time institutes. The authors mention in this connection several complicated technical problems which were sufficiently elaborated in graduation designs handed in to the Vsesoyuznyy nauchnyy politekhnicheskii institut (VZPI) (All-Union Polytechnical Correspondence Institute). They point out substantial shortcomings existing in both the regular and correspondence vuzes in regard to the graduation designs and indicate the ways how to overcome them. In order to raise the practical value of students' works, it is expedient that a group of students be entrusted with a complicated theme. As an example the authors take an automatic line for machining of electric motor shafts, developed by the Eksperimental'nyy nauchno-issledovatel'skiy institut metallorazhushchikh stankov (ENIMS) (Experimental Scientific-Research Institute of Metal-

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Planning of **Vuz Degrees** Under Present Conditions

cutting Machine Tools). In the authors' opinion the graduation design of a future mechanical engineer of various machine building branches should consist of the following basic interconnected parts: designing, technological, and organizational - economical. Safety should also be reflected in the projected machine or technological process, and not in a separate section of the work. In conclusion the authors set forth a number of recommendations which are based on their own practice and the experience of other vuzes.

ASSOCIATION: Moskovskoye vyssheye tekhnicheskoye uchilishche imeni N.E. Baumana (Moscow Higher Technical School imeni N.E. Bauman)

Card 3/3

SATEL', E., zasluzhenny deyatel' nauki i tekhniki RSFSR, doktor tekhn.
nauk, prof.

Development of the machinery industry. Izobr. i rats. no.5:6-8
My '59. (MIRA 12:8)
(Machinery industry)

SATEL', E.A., zaslužennyy deyatel' nauki i tekhniki, doktor tekhn.nauk,
Prof.

Using surface hardening techniques in increasing the durability
of machine parts. [Trudy] MVTU no.91:31-59 '59.
(MIRA 12:7)

(Hard facing)

DIMENTBERG, F.M., doktor tekhn.nauk; LYUKSHIN, V.S., kand.fiz.-mat.nauk;
NIBERG, N.Ya., kand.tekhn.nauk; OBMORSHEV, A.N., prof., doktor
tekhn.nauk; PLUZHNIKOV, I.S., kand.fiz.-mat.nauk; UMANSKIY, A.A.,
prof., doktor tekhn.nauk; ACHERKAN, N.S., prof., doktor tekhn.nauk,
red.; VUKALOVICH, M.P., prof., doktor tekhn.nauk, laureat Leninskoy
premi, red.; KUDRYAVTSEV, V.N., prof., doktor tekhn.nauk, red.;
PONOMAREV, S.D., prof., doktor tekhn.nauk, laureat Leninskoy premi;
red.; SATEL', E.A., prof., doktor tekhn.nauk, red.; SERENSEN, S.V.,
akademik, red.; HESHETOV, D.N., prof., doktor tekhn.nauk, red.; GIL'DEN-
BERG, M.I., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Reference book for machinery designers in six volumes] Spravochnik
mashinostroitelia; v shesti tomakh. Red.sovet: N.S.Acherkan i dr.
Izd.3., ispr. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
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ANTSYFEROV, M.S., kand.fiz.-mat.nauk; VUKALOVICH, M.P., prof., doktor tekhn.nauk, laureat Leninskoy premii; KRIPETS, E.S., inzh.; LAZAREV, L.P., prof., doktor tekhn.nauk; MAZTRIN, I.V., inzh.; NIKITIN, N.N., kand.fiz.-mat.nauk; OCHKIN, A.V., inzh.; PANICHKIN, I.A., prof., doktor tekhn.nauk; PETUKHOV, B.S., prof., doktor tekhn.nauk; PODVIDZ, L.G., kand.tekhn.nauk; SIMONOV, A.F., inzh.; SMIRYAGIN, A.P., kand.tekhn.nauk; TOKMAKOV, G.A., kand.tekhn.nauk; FAYNZIL'BER, E.M., prof., doktor tekhn.nauk; KHALIZEV, G.P., kand.tekhn.nauk; CHESACHENKO, V.F., kand.tekhn.nauk; YAN'SHIN, B.I., kand.tekhn.nauk; ACHERKAN, N.S., prof., doktor tekhn.nauk, red.; KUDRYAVTSEV, V.N., prof., doktor tekhn.nauk, red.; PONOMAREV, S.D., prof., doktor tekhn.nauk, laureat Leninskoy premii; red.; SATM', R.A., prof., doktor tekhn.nauk, red.; SERENSEN, S.V., skademi, red.; RESHETOV, D.N., prof., doktor tekhn.nauk, red.; KARGANOV, V.G., inzh., red.graficheskikh materialov; GIL'DENBERG, M.I., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Manual of a mechanical engineer in six volumes] Spravochnik mashinostroitelia v shesti tomakh. Red.sovet N.S.Acherkan i dr. Izd.3., ispr. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry. Vol.2. 1960. 740 p. (MIRA 14:1)

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(Mechanical engineering) (Machinery--Construction)

SATEL', E.A

GAVRILOV, A.N., prof., doktor tekhn.nauk; DEM'YANYUK, F.S., prof., doktor tekhn.nauk; MITROFANOV, S.P., kand.tekhn.nauk; KORSAKOV, V.S., prof., doktor tekhn.nauk; IVANOV, D.P., doktor tekhn.nauk; SFO-ROZHEV, M.V., kand.tekhn.nauk; MALOV, A.N., kand.tekhn.nauk; KUDRYAVTSEV, I.V., prof., doktor tekhn.nauk; SHNEYDER, Yu.G., kand.tekhn.nauk; SHUKHOV, Yu.V., dotsent; KAZAKOV, N.F., kand.tekhn.nauk; ZOLOTYKH, B.N., kand.tekhn.nauk; ROZENBERG, L.D., prof., doktor tekhn.nauk; YAKHIMOVICH, D.Ya., inzh.; NIKOLAYEV, G.A., prof., doktor tekhn.nauk; VLADZIYEVSKIY, A.P., doktor tekhn.nauk; SHAUMYAN, G.A., prof., doktor tekhn.nauk; KOSHKIN, I.N., kand.tekhn.nauk; BOBROV, V.P., kand.tekhn.nauk; NOVIKOV, M.P., kand.tekhn.nauk; VIKHMAN, V.S., kand.tekhn.nauk; DERBISHER, A.V., kand.tekhn.nauk; KLIMENKO, K.I., prof., doktor ekonom.nauk; VYATKIN, A.Ye., inzh.; SATEL', E.A., prof., doktor tekhn.nauk; POPANOV, I.G., inzh.; MATVEYENKO, V.V., inzh.; KOCHETOVA, G.F., inzh., red.izd-va; EL'KIND, V.D., tekhn.red.; TIKHANOV, A.Ya., tekhn.red.

[Present status and trends of future development of technological processes in the manufacture of machinery and instruments] Sovremennoe sostoyanie i napravleniia razvitiia tekhnologii mashinostroeniia i priborostroeniia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 563 p. (MIRA 13:7)

(Machinery industry--Technological innovations)
(Instrument manufacture--Technological innovations) (Automation)

SATEL', E.; PAVLOV, M.; KRIVOSHEYEVA, N.

Continuing the discussion on labor organization under conditions
of modern technology. Sots.trud 5 no.8:60-72 Ag '60.
(MIRA 13:11)

(Machinery industry)
(Donets Basin--Coal and coal mining)
(Dneprodzerzhinsk--Metallurgical plants)

SATEL', E.A.; YELIZAVETIN, M.A.

Technological methods for improving the quality of the surface
layer of machine parts. Trudy Sem.po kach.poverkh. no.5:21-26
'61. (MIRA 15:10)

(Surface hardening)

1.1100

28160

S/122/61/000/009/004/009
D298/D305

AUTHORS: Satel', E.A., Honored Scientist and Technologist,
Doctor of Technical Sciences, Professor, Podurayev,
V.N., Candidate of Technical Sciences, Docent,
Kamalov, V.S., Engineer and Bezborodov, A.M.
Engineer

TITLE: Technological possibilities and the prospects
for applying vibrational machining

PERIODICAL: Vestnik mashinostroyeniya, no.9, 1961, 51-57

TEXT: When high alloy tenacious steel (including heat-resis-
ting and rustproof alloys) is machined, the shavings emerge,
as a rule, in compact pieces. Such shavings complicate the
operation of automatic metal-cutting machines; subsequent re-
moval and transporting of shavings and their processing are
difficult. The methods used at present for breaking them are

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Technological possibilities ...

not universal and reliable. For this reason, the method of vibrational machining has been chosen, as it ensures reliable and stable breaking of shavings irrespective of the materials used. The authors analyze in detail this method and give pertinent diagrams and layouts for it. Particular attention is devoted to the process of machining when vibrations are applied in the direction of the work piece feed. In Figure 1 a layout of a hydraulic vibration support is given; this device permits regulating the vibration frequencies and amplitudes. To excite the vibration a hydraulic motor, type $\Gamma\Gamma-83$ (GG-V3) and a DC electric motor with transformer $\Gamma\Gamma-83$ (GE-V3) can be used. For laboratory research, vibrators $\Gamma\Gamma-B$ and $\Gamma\Gamma-B$ (GG-V and EG-V) are used. They are provided with an auto-vibrating mechanical support having the following characteristics: Vibration frequency 20-100 hertz; vibration amplitude 0.05-1.00 mm. The advantages of this support, as compared to other designs, are

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enumerated by the authors as follows: 1) It breaks the shavings formed during the process of machining. 2) It permits decreasing cutting forces and the temperature in the zone of cutting. 3) It enables diminishing the action of plastic deformation. 4) It permits shifting phases between the work piece and the instrument front angle. 5) It contributes to the appearance of local fatigue in the work piece. 6) It improves working conditions due to diminishing loads on the instrument cutting edge. When vibration amplitude is equal to the feed value per turn, the average temperature during the cutting drops by 25%. An important role is played by the intensification of fatigue determined by variable angles of cutting. When vibration frequency attains a supersonic value, the cutting speed may be considerably increased. There are 10 figures and 10 Soviet-bloc references.

Card 3/4

SATEL', E.A., doktor tekhn.nauk, prof.

Problems of mechanization and automation in introducing advanced technological processes in the machinery industry. Izv.vys. ucheb.zav.; mashinostr. no.12:7-20 '61. (MIRA 15:2)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.

(Machinery industry--Technological innovations)
(Automation)

SATEL', E.A.

Several problems in the automation of machinery manufacturing
production. Nauch.trudy MIEI no.18:8-12 '61. (MIRA 15:2)
(Machinery industry) (Automation)

SATEL', E., prof., zasluzhennyy deyatel' nauki i tekhniki

Program controlled machine tools. NTO 3 no.8:62 Ag '61.
(MIRA 14:9)

(Machine tools--Numerical control)

SATEL', E.A., doktor tekhn.nauk, prof., zasluzhenny deyatel' nauki i
tekhniki; PODURAYEV, V.N., kand.tekhn.nauk, dotsent; KAMALOV, V.S.,
inzh.; BEZBORODOV, A.M., inzh.

Engineering potentialities and the outlook for using vibratory
turning. Vest.mash. 41 no.9:51-57 S '61. (MIRA 14:9)
(Turning) (Vibrators)

SATEL', E.A., doktor tekhn.nauk, prof., zasluzhenny deyatel' nauki i tekhniki

"Organization and planning of machinery plants" by I.M.Razumov and others. Reviewed by E.A.Satel'. Vest.mash. 41 no.9:84-85 S '61. (MIRA 14:9)

(Machinery industry) (Razumov, I. M.)

31137

S/122/62/000/001/004/005
D221/D304

1100

AUTHORS: Satel', E.A., Honored Scientist and Technician, Doctor of Technical Sciences, Professor, Podurayev, V.N., Candidate of Technical Sciences, Docent, Tuktanov, A.G., and Suvorov, A.A., Engineers

TITLE: Vibratory drilling of holes in stainless and heat resisting steels

PERIODICAL: Vestnik mashinostroyeniya, no. 1, 1962, 67-70

TEXT: The MVTU imeni Baumana (MVTU im. Bauman) carried out research on vibratory drilling, where the tool receives axial oscillations. This produces small chips which are easily removed so that mechanized feed and automation of the process become feasible. The special vibratory drilling machine increased the efficiency by 2.5 times and prolonged the tool life 3 times when machining nuts in 1X18H9T (1Kh18N9T) steel. The sinusoidal axial oscillations of the drill with an amplitude a and frequency ω distort the usual helical motion of the cutting edge of the

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D221/D304

Vibratory drilling ...

tool. The equations of motion of the latter in cylindrical coordinates are $r = \frac{d}{2}$; $\varphi = \omega_n t$; $X_A = v_s t + a \sin \omega_f t$. After some manipulations, is obtained which gives the current feed s_t . Analysis

Eq. (4)

$$s_t = X_B - X_A = \frac{s_0}{2} + 2a \cos \frac{\omega_f}{\omega_n} \left(\varphi + \frac{\pi}{2} \right) \sin \frac{\omega_f}{\omega_n} \cdot \frac{\pi}{2} \quad (4)$$

of the vibratory drilling has revealed that for a given amplitude the fractioning of the chips is best, when there is a certain ratio between the number of revolutions of the tool and the frequency of vibrations. Similar results are obtained during drilling, characterized by two simultaneously oscillating cutting edges. If during a half-turn of the drill there are k full periods of oscillations and a remaining part of a period l, Eq. (7)

$$s_t = \frac{s_0}{2} + 2a \cos 2(k+l) \left(\varphi + \frac{\pi}{2} \right) \times \sin 2(k+l) \frac{\pi}{2} \quad (7)$$

In the experiments, the frequency was 200 cycles, $n=2800$ rpm; the chip Card 2/4

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Vibratory drilling ...

was broken into about four parts during one revolution of the drill. Motion of the chip in the grooves of the drill is facilitated by reduction of the friction coefficient due to the mechanics of displacement of granulated bodies on vibrating surfaces. The second factor which increases the efficiency, is due to the kinematics of the process of cutting. If the radius of curvature of the cutting edge is commensurate with the thickness of the chip (which is the case in drilling holes of small diameter) there is an intense work hardening of metal. Measurement of torque and axial forces revealed a reduction of the cutting force P_z when the feed increased up to a certain value; further increase of the feed leads to larger forces. The third factor is due to changes in the physical process of plastic deformation caused by a variable load. The speed of the drill is composed of rotational and feed components that are constant, and a superimposed oscillatory part. This results in slight alteration of the machining speed, as well as in marked changes of the cutting angles. Deformation of the metal is then changed, and the chip becomes fractured. This is especially important for stainless and heat resisting steels which are more susceptible to work hardening.

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Vibratory drilling ...

On the basis of accumulated experience, the MVTU im. Bauman has designed a drill with an electromagnetic vibrator for nut machining, and a two-spindle unit made in cooperation with Izhevskiy mashinostroitel'nyy zavod (Izhevsk Engineering Plant). The system used allows a simultaneous axial vibration of the drill. An eccentricity permits alignment of spindle within 0.01 mm. The required oscillations are produced by an electrodynamic vibrator, whose coil is fed by a frequency changer, and controlled by a rheostat. A description is given of the machine operation. The MVTU im. Bauman has also developed a semi-automatic two-spindle unit with stepless regulation of speed. A mention is made of a drill made by MVTU im. Bauman in collaboration with Izhevsk Engineering plant for vibratory drilling of holes of 5-8 mm dia., with an electro-hydraulic vibrator. Its tests proved to be satisfactory. There are 4 figures and 5 Soviet-bloc references. X

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SATEL', Eduard Adamovich, doktor tekhn. nauk, prof., red.; BRYANSKIY, Georgiy Anatol'yevich, kand. ekon. nauk; FANTALOV, Leonid Il'ich, prof.; BYALKOVSKAYA, Vera. Sergeyevna, kand. ekon. nauk; KHRZHANOVSKIY, Sergey Nikolayevich, prof.; KHOLOMINA, Ol'ga Alekseyevna, kand. ekon. nauk; STEPANOV, Aleksey Pavlovich, kand. ekon. nauk; LEVANDOVSKIY, S.N., inzh., retsenzent; MANSUROV, A.M., inzh., retsenzent; OSIPOV, Ye.G., inzh., retsenzent; SOCHINSKIY, A.R., inzh., red.; RADAYEVA, Z.A., red. izd-va; MODEL', B.I., tekhn. red.

[Organization, planning and economics of basic shops in machine plants] Organizatsiia, planirovanie i ekonomika osnovnykh tsekhov mashinostroitel'nykh zavodov. Pod red. E.A. Sateia. Moskva, Mashgiz, 354 p. (i IRA 15:4)

(Machine industry)

DUMLER, Sergey Avgustovich; GANSHTAK, Vladimir Iosifovich;
SAKSAGANSKIY, Teodor Davydovich; SATEL', E.A., zasl. deyatel'
nauki i tekhniki, prof., doktor tekhn. nauk, retsenzent;
KUZNETSOV, P.V., ekon., red.; DUGINA, N.A., tekhn. red.

[Fundamentals of the economics and organization of the machinery
industry] Osnovy ekonomiki i organizatsii mashinostroitel'nogo
proizvodstva. Moskva, Mashgiz, 1962. 472 p. (MIRA 15:6)
(Machinery industry)

SATEL', E.A., doktor tekhn. nauk, prof., zasluzhennyy déyatel' nauki i tekhniki RSFSR

Basic trends of the technological policy in the machinery industry. Vest. mashinostr. 43 no.7:3-6 J1 '63. (MIRA 16:8)

(Machinery industry—Management)

ACC NR. AM5000930

YBlizavetin, M. A.; Satel', E. A.

Technological methods for increasing the durability of machinery; increasing the operational properties and reliability of mechanical parts (Tekhnologicheskkiye sposoby povysheniya dolgovechnosti mashin; povysheniye ekspluatatsionnykh svoystv i nadezhnosti raboty detalei Mashin) Moscow, Izd-vo "Mashinostroyeniye", 1964, 438 p. illus., biblio. 5500 copies printed.

TOPIC TAGS: machinery, machine engineering, machine durability, machine part life, part resistance, metal wear, metal strengthening, machine fabrication

PURPOSE and COVERAGE: This book is intended for mechanical engineers at plants and scientific workers at research institutes who are engaged in designing and manufacturing of machines. It may also be useful to designers for technological work carried out to fabricate new or modernize old machines and to students of high level education attending the course "Machine-building Technology." This book describes modern technological methods applied to increase the durability and reliability of machines. Information on the wear of metals and the effect of technological factors on the durability of machine parts is presented. Methods of determining the durability and reliability of machine parts and subassemblies are described along with the physical principles of their strengthening and the machining methods used for this purpose. Organizational and economic problems connected with designing and fabricating durable and

UDC 621.05.002.2.004.6:620.169

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reliable machines are discussed. Factors affecting the durability and wear of machine parts are reviewed from the stand point of technological possibility of increasing their durability and reliability. It is the specific feature characterizing the present book.

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SATEL', E.A., *zasluzhennyi deyatel'nauki i tekhniki RSFSR*, doktor tekhn.
nauk, prof.; PUPKOV, Ye.I., inzh.

Conference of institutions of higher education on scientific
fundamentals of an advanced technology for the manufacture of
machinery and instruments. *Vest.mashinoatr.* 44 no.7:83-87 J1 '64.
(MIRA 17:9)

SATEL', E.A., prof., doktor tekhn. nauk

There is no quality without precision. Standartizatsia 28
no.10:31-32 0 '64. (MIRA 17:12)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche im. Baumana.

SATEL', E.A., zasluzhennyi deyatel' nauki i tekhniki, doktor tekhn.
nauk, prof.; PUPKOV, Ye.I., inzh.

Explosion hardening of metals abroad. Vest. mashinostr. 44 no.6:
75-77 Je '64. (MIRA 17:8)

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shinostr. no.3:5-11 '65. (MIRA 18:6)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni
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KHEYNMAN, Solomon Aronovich; SATEL', E.A., doktor tekhn. nauk, retsenzent; KLIMENKO, K.I., doktor ekonom. nauk, retsenzent; STANKOVICH, V.G., inzh., red., retsenzent; MIRKIN, A.A., inzh., red., retsenzent; CHERNOVA, Z.I., tekhn. red.

[Problems of automation in the United States; review of materials published in the United States] Voprosy avtomatizatsii v SShA; obzor materialov, opublikovannykh v SShA. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1960. 222 p. (MIRA 14:5)
(United States--Automation)

SATLER, J.; BOLAR, P.

Use of polarography in the differential diagnosis of hepatocellular and obstructive jaundice. Acta med. Ingesi. 18 no.1:58-66 '64

1. Interna klinika Medicinskog fakulteta u Ljubljani.

SATLER, V.M., inzh.

Industrial television system of the Moscow post office. Vest. sviazi
24 no.9:8-10 S '64. (MIRA 17:11)

1. Moskovskiy pochtamt.

SATENKO, A.

Transit hauling of goods to the market network. Avt. transp.
33 no.4:12-13 Ap '55. (MIRA 8:7)
(Transportation, Automotive)

SATENKO, A.

SATENKO, A.

New methods of transporting bread and bakery goods. Avt.transp.
33 no.6:13 Je '55. (MLRA 8:10)
(Bread--Transportation)

SATEVA, MILKA

Yugoslavia/Chemical Technology - Chemical Products and Their Application. Synthetic Polymers. Plastics, I-

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63133

Author: Sateva, Milka; Brihta, Ivan

Institution: None

Title: Plasticizers for Polyvinyl Chloride Based on Esters of Chlorinated Fatty Acids

Original

Periodical: Omeksivaci za polivinilklorid na bazi estera kloriranih masnih kiselina. Kemija u industriji, 1954, 3, No 5, 145-151; Croatian; German, English, and French resums

Abstract: Esters of chlorinated fatty acids (I) are obtained by esterification of the corresponding acid and subsequent chlorination of the ester in the presence of 0.01% J_2 at 85-90° to a 24% Cl-content and a final photochlorination to a 33% content of combined Cl. Photochlorination is carried out in an enamel vessel provided with a stirrer and a 500 watt lamp. After 16 hour chlorination at 90°, I are obtained

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Yugoslavia/Chemical Technology - Chemical Products and Their Application. Synthetic Polymers. Plastics, I-

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63133

Abstract: containing 34% Cl. For the production of plasticized polyvinyl chloride use is made of I containing Cl > 33% stabilized with 3% phenoxy propenoxide. Characteristics of plastic "A" (parts by weight: 100 polyvinyl chloride, 10 dioctyl phthalate, 50 I and 7 basic Pb carbonate), and plastic "B" prepared without addition of I, are respectively: tensile strength (kg/cm^2) 213 and 158; elongation at break (%) 335 and 257, cold brittleness -4 and -14° .

Card 2/2

SATEYEV, A.F., entomolog

Fruit pests in Karaganda Province. Zashch. rast. ot vred. i bol.
7 no.8:58 Ag '62. (MIRA 15:12)

1. Botanicheskiy sad AN KazSSR, g. Karaganda.
(Karaganda Province—Fruit—Diseases and pests)
(Karaganda Province—Insects, Injurious and beneficial)

SATEYEV, A.F.

Effect of wintering conditions on the destruction of caterpillars of
the codling moth in central Kazakhstan. Trudy Inst.bot.AN Kazakh.SSR
17:189-194 '63.
(MIRA 17:3)

LUK'YANCHIKOV, V.P.; TRON', Ye.A., mladshiy nauchnyy sotrudnik;
KHASANKAYEV, Ch.S.; ZLOTIN, A.Z.; GEVLICH, O.P., mezhrayonnyy
lesopatolog; DAVIDENKO, L.K., nauchnyy sotrudnik; SATEYEV, A.F.,
mladshiy nauchnyy sotrudnik

Brief information. Zashch. rast. ot vred. i bol. 9 no.3;
53-55 '64. (MIRA 17:4)

1. Biologicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk (for Luk'yanchikov).
2. Ternopol'skaya sel'skokhozyaystvennaya opytnaya stantsiya (for Tron').
3. Tatarskaya lesnaya opytnaya stantsiya (for Khasankayev).
4. Grakovskoye opytnoye pole, Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy (for Zlotin).
5. Borovaya lesnaya opytnaya stantsiya (for Davidenko).
6. Karagandinskiy botanicheskiy sad AN KazSSR (for Satayev).

SALEK, Z

3

3286* Method of Manufacturing of Chromite-Magnesite
Products. Opracowanie metody produkcji wyrobów chromo-
magnezytowych. (Polish.) Z. Salek. Prace Instytutu
Ministerstwa Hutnictwa, v. 6, no. 2, 1954, pp. 233-235.
Effects of various additions and treatments on properties.
Tables, photographs, micrographs.

M. J. W.

SATHYANARAYANA, S.; UDUPA, H.V.K.

Electrode potential studies in the anodic oxidation of glucose.
Bul Ac Pol chim. 6 no.8:493-497 '58. (EAI 9:6)

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S.India. Presented by T.Urbanski.
(Glucose) (Electrodes)

SATIAN, N.A.

Some characteristics of the composition of carbonate formation
of the upper Senonian in Idzhevan and Noemberyan Districts.
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(Armenia--Rocks, Carbonate)

SATIAN, M. A., Cand Geol-Min Sci -- (diss) "Lithology and paleography of chalk deposits of the land between the Indzha-Su River, the central stretch of the Agstev River, and the Gasan-Su River. (Northern Armenia)." Yerevan, 1960. 25 pp; (Inst of Geological Sciences Acader, of Sciences Uzbek SSR, Inst of Geological Sciences Academy of Sciences Armenian SSR); 150 copies; price not given; (KL, 22-60, 133)

ANAN'YAN, A.K., doktor tekhn. nauk, prof.; BEK-YARMARCHEV, B.I.,
kand. geogr. nauk; ZHAMAGORTSYAN, V.N., kand. tekhn. nauk;
CHITCHYAN, A.I., kand. sel'khoz. nauk; YEDIGARYAN, Z.P.,
mlad. nauchnyy sotr.; SATIAN, M.A., kand. geol.-mineral.
nauk; PAYRAZYAN, V.V., mladshiy nauchnyy sotr.; VEBER, V.V.,
prof.; NAZARYAN, A.G., kand. tekhn. nauk; POKHSRARYAN, M.S.,
mladshiy nauchnyy sotr.; TER-ASTVATSATRYAN, M.I., mladshiy
nauchnyy sotr.; VELIKANOV, M.A.; VELIKANOV, M.A., otv. red.;
SHTIBEN, R.A., red. izd-va; KAPLANYAN, M.A., tekhn. red.

[Results of complex research on the Sevan problem] Rezul'taty
kompleksnykh issledovaniy po Sevanskoi probleme. Erevan,
Izd-vo AN Armyanskoi SSR. Vol.2. [Channel processes] Ruslovye
protsessy. 1962. 255 p. (MIRA 15:7)

1. Akademiya nauk Armyanskoy SSR, Yerivan. Institut vodnykh
problem. 2. Chlen-korrespondent Akademii nauk SSSR (for
Velikanov).

(Sevan Lake region--Hydrology)

SATIAN, M.A.; KYUREGYAN, E.A.; MKRTCHYAN, G.M.; MARTIROSYAN, M.Ya.

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'62. (MIRA 15:5)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Sevan Lake region--Molybdenum)

SATIAN, M.A.

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on the basis of minor chemical elements. Izv. AN Arm.SSR.
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(Agstev Valley--Rocks, Sedimentary)
(Trace elements)

SATIAN, M.A.

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1. Institut geologicheskikh nauk AN Armyanskoy SSR.

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1. Institut geologicheskikh nauk AN Armyanskoy SSR.

FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.; SATIMBAYEV, R.S.; PODLEGAYEV, I.P.;
MALININA, A.I.

Using low-viscosity preparations of carboxymethylcellulose
for stabilizing weighted clay muds. Izv.vys.ucheb.zav.; neft'
i gaz 5 no.4:25-27 '62. (MIRA 16:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlen-
nosti imeni akademika I.M.Gubkina, Namanganskiy zavod
iskusstvennogo volokna.
(Cellulose) (Oil well drilling fluids)

SATIN, Ivan Semenovich; KOBRIN, B., redaktor; YAKOVLEVA, Ye., tekhnicheskii
redaktor

[Lowering the production unit cost on collective farms] Snizhenie
zatrat na editsu kolxoznoi produktsii. [Moskva] Moskovskii
rabochii, 1956. 76 p. (MLRA 9:11)
(Collective farms)

PIOTKIN, M.Yu., inzh.; SATIN, M.A., kand. tekhn. nauk

Air-entrained reinforced concrete slabs made with nepheline
slags. Biul. tekhn. inform. po stroi. 5 no.6:14-15 Je '59.
(MIRA 12:10)

(Concrete slabs)

SATIN, M. S., Cand of Tech Sci -- (diss) "Autoclastic foamy cement in certain industrial wastes which is contained in double calcium silicates." Leningrad, 1957, 10 pp, Leningrad Engineering Construction Institute), 100 copies (KL, 29-57,91)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
p 159 (USSR) 15-57-10-14333

AUTHORS: Bozhenov, P. I., Satin, M. S.

TITLE: The Properties and Technique of Preparing Aerocrete
From Nepheline Cement (Svoystva i tekhnologiya izgotov-
leniya penobetona na nefelinovom tsemente)

PERIODICAL: V sb: 15-ya nauchn. konferentsiya Leningr. inzh.-
stroit. in-ta, Leningrad, 1957, pp 407-409

ABSTRACT: Autoclave-treated aerocrete made of nepheline cement
compares favorably in quality with aerocrete from port-
land cement, which fast demonstrates the advisability
of using aerocrete from belite type cement for technical
purposes. Because of the high viscosity of the nephe-
line cement mix it is fully possible to use it with
natural unground sand having grain diameters up to 1 mm.
The aerocrete thus obtained will yield nonshrinking
articles up to 40 cm or 60 cm in height even with the
use of unground sand. V. P. Yeremeyev

Card 1/1

SATIN, M.S., inzhener; BABAYEV, V.G., inzhener.

Using cellular granulated slag concrete. Stroi. prom. 35
no.1:48-49 Ja '57. (MIRA 10:2)

(Lightweight concrete)

VAGANOV, Anatoliy Ivanovich, prof., doktor tekhn.nauk [deceased]; SATALKIN, A.V., prof., doktor tekhn.nauk, red.; SATIN, M.S., red.; PUL'KINA, Ye.A., tekhn.red.

[Investigating properties of keramzit-concrete] Issledovaniia svoistv keramzitobetona. Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 63 p. (MIRA 13:9)
(Lightweight concrete)

USPENSKIY, Vadim Panteleymonovich; SATIN, M.S., kand.tekhn.nauk,
nauchnyy red.; NECHAYEV, G.A., red.izd-va; PUL'KINA, Ye.A.,
tekhn.red.

[Method for laying concrete in building hydraulic structures]
Opyt organizatsii betonnykh rabot na gidrotekhnicheskoy stroi-
tel'stve. Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i
stroit.materialam, 1960. 143 p. (MIRA 13:5)
(Concrete construction)
(Hydraulic structures)

IVANOV, V.I.; SATIN, M.S.; GRIGOR'YEV, Ye.G.

Production of aerated concrete products at the Avtovo
Housing Construction Combine. Bet.1 zhel.-bet. no.6:
248-250 Je '60. (MIRA 13:7)

1. Nachal'nik Avtovskogo domostroitel'nogo kombinata
Glavlenigradstroya (for Ivanov). 2. Rukovoditel' laboratorii
stroitel'nykh materialov Leningradskogo filiala Akademii
stroitel'stva i arkhitektury SSSR (for Satin). 3. Nachal'nik
laboratorii Avtovskogo domostroitel'nogo kombinata Glavlenigrad-
stroya (for Grigor'yev).
(Leningrad—Lightweight concrete)

BOZHENOV, P.I., doktor tekhn. nauk, red.; SATIN, M.S., kand. tekhn. nauk, red.; REYZ, M.B., red. izd-va; ROZOV, L.K., tekhn. red.

[Building materials] Stroitel'nye materialy; sbornik nauchnykh soobshchenii . Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 100 p. (MIRA 14:11)

1. Akademiya stroitel'stva i arkhitektury SSSR. Leningradskiy filial.
2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Bozhenov).

(Concrete)

ALEKSANDROV, Vladimir Mikhaylovich. Prinsipal'nyye uchastnye: KHYLOV, N.A.,
kand. tekhn. nauk; CHERKASOV, V.N., inzh.; RUSAKOV, M.Ye., arkhitekt.;
YAKKER, N.I., arkhitekt.; SATIN, M.S., kand. tekhn. nauk, nauchnyy red.;
MAKSIMOV, K.G., red. izd-va; PUL'KINA, Ye.A., tekhn. red.

[Large silicate blocks made of quicklime] Krupnye silikatnye bloki
na negashennoi izvesti; opyt Leningrada. Leningrad, Gos.izd-vo lit-
ry po stroit., arkhitekt., i stroit.materialam, 1961. 103 p.

(MIRA 14:11)

(Building blocks) (Sand-lime products)

S/081/61/000/022/049/076
B101/B147

AUTHORS: Satin, M. S., Klem, V. R.

TITLE: Structural foam concrete for supporting constructions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 313, abstract
22K334 (Sb. "Stroit. materialy". L., 1961, 24 - 26)

TEXT: The most important technological conditions and the physico-mechanical properties of autoclaved foam concrete with a weight by volume of 1500 kg/m^3 and a strength of 250 kg/cm^2 were studied. This concrete was produced from unground sand and nepheline cement obtained by joint grinding of 71% of nepheline slime of the Volkov Aluminum Plant, 25% of Portland-cement clinkers and 4% of gypsum. For obtaining concrete with a strength of 150 to 250 kg/cm^2 and a weight by volume of 1300 to 1500 kg/m^3 the optimum steaming conditions are 2 + 4 + 3 at 12 atm. If concrete is steamed at 8 atm the same strength is achieved only after >15 - 19 hr. [Abstracter's note: Complete translation.]

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GRIGOR'YEV, Ye.G.; SATIN, M.S.; DERYABIN, I.M.; IVANOV, A.K., inzh.,
nauchnyy red.; DNEPROVA, N.N., red. izd-va; PUL'KINA, Ye.A.,
tekhn. red.

[Residential buildings made of air-entrained concrete] Zhi-
lye doma iz gazobetona; opyt Leningrada. Leningrad, Gos-
stroizdat, 1962. 130 p. (MIRA 15:10)
(Leningrad--Apartment houses)
(Lightweight concrete)

MALKOV, David Emmanuilovich; SATIN, M.S., kand. tekhn. nauk, nauchnyy red.; PETRENKO, N.P., red. izd-va; PUL'KINA, Ye.A., tekhn. red.

[Techniques of the manufacture of thin-walled prestressed concrete slabs] Tekhnologiya izgotovleniya tonkostennykh prevaritel'no napriazhennykh zhelezobetonnykh panelei. Leningrad, Gosstroizdat, 1962. 138 p. (MIRA 15:9)
(Prestressed concrete)

SATIN, M.S.; KLEM, V.R.; ROTENBERG, A.S., red.; CHERKASSKAYA, F.T.,
tekh. red.

[Porous fine concretes hardened in autoclaves] Porizovannye mal-
kozernistye betony avtoklavnogo tverdeniia. Leningrad, Gos-
stroizdat, 1962. 58 p. (MIRA 16:2)
(Lightweight concrete--Testing) (Nephelite)